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EXAMINER

PEACHES, RANDY

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/764,952	Applicant(s) KATO, HIDEO	
	Examiner RANDY PEACHES	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. ***Claim 20*** recites the limitation "said receiver" in the last sentence of the claim. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 20 and 22 are rejected*** under 35 U.S.C. 103(a) as being unpatentable over Tsugane et al. (U.S. Patent Number 5,657,370) in view of Johnson et al. (U.S. Patent Application Number 2002/0132633 A1) in further view of Boesen (U.S. Patent Number 6,542,721 B2).

Regarding ***claim 20***, Tsugane et al. discloses a slide mechanism, see FIGURE 3A-D, to connect the 1st housing (1), which reads on claimed "first member," and a 2nd housing (2), which reads on claimed "second member," a formed separately from each other to be slidable in one direction to form a closed state in which the said 1st housing (1) and

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the said 2nd housing overlap one another, and to form an opened state in which the top face of either member is exposed, said slide mechanism comprising:

- a slider (8), which reads on claimed "a pair of a hinge device," provided with a guide grooves (7) attached on both sides, which reads on claimed "guide member," to be exposed and moveably forwardly and backwardly by being biased slidably in one direction. See column 4 lines 18-37 and FIGURE 3B;
- a guide groove (7) provided on both sides of the other one of the first and second member, to the said guide grooves (7) of the said slider (8) in an engaged state. See FIGURE 3B;
- a recessed portion (9) provided on each said groove to receive and lock each guide groove of the said slider (8) at a selected position. See column 4 lines 38-47; and

However, Tsugane et al. fails to clearly disclose wherein each hinge device is composed of a hinge case provided with a turn stopper and inserted in setting holes of both sides of said one of the first and second members, a ball bearing slidably and rotatably mounted to one side of said hinge case in an engaging condition with said guide grooves, a receiver being slidably inserted in said hinge case for receiving said ball bearing, and resilient means interposed between said hinge case and said receiver.

Johnson et al. teaches in paragraphs [0029 and 0032] wherein two distinct pair of hinges (35) are used for sliding a member of the device. See FIGURE 5.

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Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify Tsugane et al. to include Johnson et al. in order to have a device capable of being slidable and rotatable around a pair of hinged devices.

However, the combination of Tsugane and Johnson fails to clearly state wherein a resilient mean provided in said hinge case adapted to urge the ball bearing into the engaging condition with said guide groove.

Boesen teaches in FIGURE 12 where 4 ball bearings (104) are represented, in addition to a groove guide capable of guiding the bearing when the device is folded

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teaching of Tsugane et al. and Johnson et al. to included Boesen in order to have a device capable of being slidable and rotatable around a pair of hinged devices.

Regarding **claim 22**, as the combination of Tsugane et al., Johnson et al. and Boesen are made, the combination according to **claim 20**, continues to teaches wherein a portable phone (column 4 lines 18-25), comprising:

- a box of a transmitter forming the first member (see Tsugane et al, FIGURE 6B, column 4 lines 26-30); and
- a box of a receiver forming the second member separately(see Tsugane et al, FIGURE 6B, column 4 lines 26-30);
- wherein said portable phone forms a closed state covering the top face of said transmitter with the said receiver, and an opened state of sliding said receiver in

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one direction from said transmitter to expose the top face of the transmitter by connecting the transmitter and the receiver slidably to each other via the slide mechanism. (See Tsugane et al, FIGURE 9a and 9b)

3. **Claims 21 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsugane et al. (U.S. Patent Number 5,657,370) in view of Johnson et al. (U.S. Patent Application Number 2002/0132633 A1) in further view of Boesen (U.S. Patent Number 6,542,721 B2) in further view of Sudo et al. (U.S. Patent Number 7,146,195 B2).

Regarding **claims 21 and 25**, as the combination of Tsugane et al., Johnson et al. and Boesen are made, the combination according to **claim 20**, fails to clearly disclose the hinge case further comprises a turn stopper adapted to prevent rotation of the hinge case in the setting holes.

Sudo teaches in Figure 16 and 17 and column 10 lines 32-40, of a hinge unit (4) constructed so as to be able to hold the cover at pivotal positions of 90 and 180 degrees which also includes a first and second stopper used when in an engaging position to stop the rotation of the said hinge unit (4).

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combined teaching of Tsugane et al., Johnson et al. and Boesen and Sudo et al. in order to provide a stopper capable of restricting the movement (rotation) of the said hinge unit when in an engaging position.

4. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tsugane et al. (U.S. Patent Number 5,657,370) , Johnson et al. (U.S. Patent Application Number 2002/0132633 A1) , Boesen (U.S. Patent Number 6,542,721 B2) in further view of Hansen et al. (U.S. Patent Number 6,370,362 B1).

Regarding **claim 23**, as the combination of Tsugane et al., Johnson et al. and Boesen are made, the combination according to **claim 20**, fails to clearly disclose wherein the said guide groove is disposed in a bent state so that the second member forms an obtuse angle with the first member when the first member and the second member are in an opened state.

Hansen et al. discloses in column 1 lines 30-40 wherein the sliding rails, which reads on claimed "guide groove," is slightly curved, which reads on claimed "bent," substantially the entire length of the said rails.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combination of Tsugane et al. ,Johnson et al., Boesen in view of Hansen et al. in order to provide a slide mechanism that is slightly curved to contour the user's body when the device in use.

5. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tsugane et al. (U.S. Patent Number 5,657,370) , Johnson et al. (U.S.

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Patent Application Number 2002/0132633 A1) , Boesen (U.S. Patent Number 6,542,721 B2) in further view of Masuda et al. (U.S. Patent Number 5,335,274).

Regarding **claim 24**, as the combination of Tsugane et al., Johnson et al. and Boesen are made, the combination according to **claim 22**, fails to clearly disclose wherein said first and second members by lifting a sliding tip end of the receiver slightly during sliding of said receiver when said transmitter and said receiver are in an opened state. Masuda et al. discloses column 5 lines 34-50 and FIGURE 5B wherein first and second members by lifting a sliding tip end of the receiver slightly during sliding of said receiver when said transmitter and said receiver are in an opened state.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the combination of Tsugane et al. ,Johnson et al., Boesen in view of Masuda et al. in order to provide a slide mechanism that is slightly curved to contour the user's body when the device in use.

Response to Arguments

Applicant's arguments with respect to **claims 20-25** have been considered but are moot in view of the new ground(s) of rejection.

The Examiner has reconsidered the presented claims and taking the broadest, most reasonable interpretation of claims, has concluded that the claims are not in condition for allowance and are thereby rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDY PEACHES whose telephone number is (571) 272-7914. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Randy Peaches/
Examiner, Art Unit 2617

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617